What Is Claimed Is:

1. A functional film fabrication method for fabricating a functional film on a base having a flat surface, comprising:

an installation step, wherein the base is installed so that the flat surface is on top, and a droplet discharge head with a plurality of nozzles aligned in a first direction is placed above the flat surface;

a first discharge step, wherein droplets of a functional liquid are discharged from the nozzles onto the base;

a nozzle movement step, wherein the nozzles are moved relative to the base in the first direction and in a perpendicular second direction over the short distance between the nozzles in the first direction; and

a second discharge step, wherein droplets of the functional liquid are discharged from the nozzles onto the base.

2. The functional film fabrication method according to claim 1, wherein the functional liquid is a protective film material for a color filter.

3. The functional film fabrication method according to claim 2, further comprising:

a filter formation step performed before the installation step, wherein a color filter is formed on the flat surface of the base; and

a drying step performed after the second discharge step, wherein the droplets are dried.

4. The functional film fabrication method according to claim 3, further comprising:

a surface modification step between the filter formation step and the installation step, wherein the surface of the color filter is modified and the wettability of the color filter surface is improved.

5. A functional film fabrication method for fabricating a functional film on a base having a flat surface, comprising:

an installation step, wherein the base is installed so that the flat surface is on top, and a droplet discharge head with a plurality of nozzles aligned in a first direction is placed above the flat surface, and

an application step, wherein a functional film is fabricated on the flat surface by repeating a discharge step wherein droplets of a functional liquid are discharged from the nozzles onto the base; and a nozzle movement step wherein the nozzles are moved relative to the base in the first direction and in a perpendicular second direction over the short distance between the nozzles in the first direction.

6. The functional film fabrication method according to claim 5, wherein the application step is a step for applying the functional liquid on the entire flat surface of the base.

7. The functional film fabrication method according to claim 5, wherein the application step involves controlling the thickness of the functional film by varying the discharged amount of the droplets in the discharge step and/or the second direction movement distance in the nozzle movement step.

8. The functional film fabrication method according to claim 5, wherein the functional liquid is a protective film material for a color filter.

9. The functional film fabrication method according to claim 5, further comprising,

a filter formation step, wherein a color filter is formed on the flat surface of the base before the installation step, and

a drying step, wherein the functional film is dried after the application step.

10. The functional film fabrication method according to claim 9, further comprising,

a surface modification step between the filter formation step and the installation step, wherein the surface of the color filter is modified and the wettability of the color filter surface is improved.

11. The functional film fabrication method according to claim 10, further comprising,

an opposing substrate arrangement step, wherein an opposing substrate is disposed facing the functional film after the drying step, and

a liquid crystal injection step, wherein liquid crystal is injected between the functional film and the opposing substrate.

12. The functional film fabrication method according to claim 11, further comprising,

an electro-optical panel configuration step, wherein specific mounting components are affixed to the base to configure an electro-optical panel after the liquid crystal injection step.

13. The functional film fabrication method according to claim 11, further comprising,

a light-emitting element formation step, wherein a light-emitting element is formed in a matrix configuration on the opposing substrate after the liquid crystal injection step.

14. An electro-optical panel, formed by a method comprising:

a filter formation step, wherein a color filter is formed on the flat surface of a base;

a surface modification step, wherein the surface of the color filter is modified and the wettability of the color filter surface is improved;

an installation step, wherein the base is installed so that the color filter is on top, and a droplet discharge head with a plurality of nozzles aligned in a first direction is placed above the color filter;

an application step, wherein a functional film is fabricated on the color filter by repeating a discharge step wherein droplets of a functional liquid are discharged from the nozzles onto the color filter, and a nozzle movement step wherein the nozzles are moved relative to the base in the first direction and in a perpendicular second direction over the short distance between the nozzles in the first direction;

a drying step, wherein the functional film is dried;

an opposing substrate arrangement step, wherein an opposing substrate is disposed facing the functional film after the drying step;

a liquid crystal injection step, wherein liquid crystal is injected between the functional film and the opposing substrate; and

an electro-optical panel configuration step, wherein specific mounting components are affixed to the base to configure an electro-optical panel.

15. A functional film fabrication apparatus for fabricating a functional film on a base having a flat surface, comprising:

a stage for holding the base such that the flat surface is on top;

a droplet discharge head with a plurality of nozzles aligned in a first direction for discharging droplets of a functional liquid from the nozzles onto the base;

a movement mechanism connected to the stage and/or the discharge head in order to move the discharge head above the stage in relative fashion in a second direction perpendicular to the first direction; and

a control part electrically connected to the movement mechanism, such that the movement mechanism moves the nozzles relative to the stage in a perpendicular second direction over the short distance between the nozzles in the first direction.

16. The functional film fabrication apparatus according to claim 15, wherein the control part is also electrically connected to the discharge head and controls the thickness of the functional film by varying the amount of the droplets discharged from the discharge head and/or the second direction movement distance due to the movement mechanism.

17. The thin film fabrication apparatus according to claim 16, wherein the droplet discharge head is a piezojet type.

18. A functional film fabrication apparatus for fabricating a functional film on a base having a flat surface, comprising:

holding means for holding the base such that the flat surface is on top;

droplet discharge means with a plurality of nozzles aligned in a first direction for discharging droplets of a functional liquid from the nozzles onto the base; and

control means for controlling the holding means and the droplet discharge means to repeat a discharge step wherein droplets of a functional liquid are discharged from the nozzles onto the color filter, and a nozzle movement step wherein the nozzles are moved relative to the base in the first direction and in a perpendicular second direction over the short distance between the nozzles in the first direction.

19. The functional film fabrication apparatus according to claim 18, wherein the control means controls the thickness of the functional film by varying the amount of the droplets discharged from the discharge head and/or the distance of relative movement in the second direction of the droplet discharge means in relation to the holding means.

20. The thin film fabrication apparatus according to claim 19, wherein the droplet discharge head is a piezojet type.